

Listing of Claims

The following listing of claims will replace all prior versions, and listings, of claims in the subject application:

1. (currently amended) A recording head of an inkjet recording apparatus for recording an image on an object, comprising:

a recording head unit supplied with ink for recording an image on a recording object by forming a jet of the ink, said recording head unit comprising:

a nozzle for ejecting said jet;

a passage of ink provided in communication with said ink nozzle for supplying said ink to said nozzle;

an energization part provided on said passage for applying energy to said ink in said passage to form said jet;

and

an ink inlet formed in communication with said passage for receiving said ink, said inlet including therein filter means which is made from stainless steel mesh for eliminating particles from said ink supplied to said inlet; and

an ink reservoir unit for holding therein said ink, said ink reservoir unit supplying said ink held therein to said inlet of said recording head part, said ink reservoir unit accommodating therein a sponge material infiltrated with said ink;

said recording head unit including a first guide member for connecting said recording head unit to said ink reservoir unit;

said ink reservoir unit including a second guide member for mating with the first guide member and guiding the ink reservoir unit

onto said recording head unit so that said ink reservoir unit can be aligned with and removably mounted to said recording head unit;

said first and second ~~connection means~~ guide members being so formed that said first and second ~~connection means~~ guide members establish, when said ink reservoir unit is mounted upon said recording head unit, a detachable engagement with each other in a manner, such that said ink in said reservoir unit flows to said passage in said recording head unit; and

a carriage member constructed so as to be mounted upon an image recording apparatus for carrying thereon said recording head unit and said reservoir unit together detachably in the state that said recording head unit and said reservoir unit are connected with each other detachably such that said reservoir unit connected to said recording head unit is removable therefrom, said carriage member having a positioning part for determining a position of said nozzle of said recording head unit with respect to said carriage member, and wherein said ink reservoir unit carrying a vent;

said recording head unit having a positioning part for engagement with said positioning part of said carriage member,

said recording head unit carrying thereon electrode contacts.

Claim 2 (canceled).

3. (previously presented) A recording head as claimed in claim 1, wherein said positioning part of said carriage member forms a mechanical engagement with said recording head unit on which said nozzle is formed.

4. (previously presented) A recording head as claimed in claim 3, wherein said carriage member carries thereon an interconnection pattern for carrying electric signals, said electrode contacts on said recording head unit thereby establishing an electrical contact with said interconnection pattern of said carriage member when said recording head unit and said ink reservoir unit are mounted upon said carriage member.

5. (currently amended) A recording head as claimed in claim 1, wherein ~~said recording head unit has a first guide part for guiding said ink reservoir unit with respect to said recording head unit for mounting and dismounting said ink reservoir unit on and from said recording head unit, said ink reservoir unit having a corresponding second guide part for engagement with said first guide part~~ first guide member comprises a guide rail and said second guide member comprises a guide groove corresponding to and for receiving said guide rail.

Claims 6-8 (canceled).

9. (previously presented) A recording head as claimed in claim 1, wherein said ink reservoir vent communicates an interior and an exterior of said ink reservoir unit, said vent being closed by a removable seal member.

Claims 10 and 11 (canceled).

12. (previously presented) A method for recording an image on an object by means of an inkjet recording apparatus, said inkjet

recording apparatus including a recording head unit carrying thereon an ink nozzle for forming an inkjet and a first guide member and an ink reservoir for storing ink with a sponge material, said ink reservoir including a second guide member for mating with the first guide member, said ink reservoir being so constructed as to be mounted upon said recording head unit detachably therefrom via said first second guide members and carrying a vent closed by a seal member, said recording head unit carrying a stainless mesh filter on an inlet of said ink, said recording head unit including a positioning part for positioning said recording head unit on a carriage, and electrode contacts, said method of comprising the steps of:

detachably mounting said ink reservoir upon said recording head unit by sliding the first and second guide member with respect to each other so that said ink reservoir can be aligned with an removably mounted to said recording head unit and such that the ink in said ink reservoir is supplied to said recording head unit;

mounting said recording head unit and ink reservoir on said carriage such that said positioning part of said recording head unit engages a positioning part of said carriage for positioning said recording head unit with respect to said carriage such that electrical contact is made between said electrode contacts on said recording head unit and electrode contacts on said carriage; and

removing said seal member such that an interior space of said ink reservoir communicates directly with an exterior of said ink reservoir via said vent.

13. (previously presented) A recording head for an inkjet recording apparatus for recording an image on an object, comprising:

a recording head unit supplied with ink for recording an image on a recording object by forming a jet of the ink, said recording head unit comprising:

a nozzle for ejecting said jet,

a passage of ink provided in communication with said ink nozzle for supplying said ink to said nozzle,

a first guide member,

an energization part provided in said passage for applying energy to said ink in said passage to form said jet,
and

an ink inlet formed in communication with said passage for receiving said ink; and

an ink reservoir unit for holding therein said ink, and comprising a second guide member for mating with said first guide member and guiding the ink reservoir onto said recording head unit so that said ink reservoir can be aligned with and removably mounted to said recording head unit.

14. (previously presented) A recording head as recited in claim 13, wherein said first guide member comprises a guide rail and said second guide member comprises a guide groove corresponding to and for receiving said guide rail.

15. (previously presented) A recording head as recited in claim 14, wherein said guide rail is slidably mountable in said guide groove.

16. (currently amended) A recording head as recited in claim 4 14, wherein said guide rail comprises an elongated tract and said guide

groove comprises a corresponding elongated groove for receiving the elongated tract.

17. (new) A recording head as recited in claim 13, wherein said recording head unit has a generally L-shaped form having a front part and a top part connected with each other, and said ink reservoir unit has a rectangular shape having a front surface for engagement with said front part of said recording head unit and a top surface for engagement with said top part of said recording head unit.

18. (new) A recording head as recited in claim 17, wherein said recording head unit carries said first guide member at a lower surface of said top part, and said ink reservoir unit carries said second guide member at said top surface.